CLAIMS

What is claimed is:

1. A method of registering a sheet of a copy medium in a duplex reproduction machine to alleviate the misalignment between the respective images copied on the front and back of said particular sheet, said method comprising:

measuring the error angle of skew between a registration target angle and the trailing edge of said sheet during a first pass before a first image is reproduced on said front of said sheet; and

adjusting said registration target angle for said sheet during a second pass to compensate for said error angle of skew wherein any misalignment between said first image and a second image to be reproduced on the back of said sheet is alleviated.

2. The method of claim 1 wherein said registration target angle is equal to 90°.

3. The method of claim 2 wherein said registration target angle for said second pass is adjusted to a value equal to (90° + said error angle of skew).

4. The method of claim 3 wherein said error of skew is measured by a pair of sensors located near the top and the bottom of said sheet which sense said trailing edge of said sheet as said sheet passes over said sensors.

5. The method of claim 4 wherein said error angle of skew is stored during said first pass and is then retrieved during said second pass.

6. A method of registering a particular sheet of a copy medium in a duplex reproduction machine to alleviate the misalignment between the respective images copied on the front and back of said particular sheet, said method comprising:

measuring the error angle of skew between a desired, registration target angle of 90° and the actual angle of the trailing edge of said particular sheet as said particular sheet passes through a sheet registration mechanism during a first pass wherein an image is to be reproduced on said front of said sheet;

generating a signal representative of said measured error angle of skew;

storing said signal for said particular sheet;

retrieving said signal as said particular sheet is fed for a second pass during which an image is to be reproduced on said back of said particular sheet; and

setting a new registration target angle for said sheet registration mechanism which compensates for said error angle of skew before said particular sheet passes through said sheet registration mechanism during said second pass.

7. The method of claim 6 wherein said new registration target angle is equal to (90° + said error angle of skew).

8. The method of claim 7 wherein said error of skew is measured by a pair of sensors in said sheet registration mechanism which sense the upper and lower portions, respectively, of said trailing edge of said sheet as said sheet passes over said sensors.

9. The method of claim 8 wherein said measurement of said error of skew is derived from the difference of when said respective sensors detect said upper and lower portion of said trailing edge of said sheet.